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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,499	03/26/2004	Masayuki Tsuda	9683/179	8154

27879   7590   11/30/2007

INDIANAPOLIS OFFICE 27879
BRINKS HOFER GILSON & LIONE
ONE INDIANA SQUARE, SUITE 1600
INDIANAPOLIS, IN 46204-2033

EXAMINER
SAMS, MATTHEW C

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
11/30/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentofficeactions@brinkshofer.com
svessely@usebrinks.com
dhasler@usebrinks.com

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>05 September 2007</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>5-9 and 12-42</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>5-9 and 12-42</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This office action is in response to the amendment filed on 9/5/2007.

2.   Claims 30-42 have been added.

Information Disclosure Statement

3.   The information disclosure statement filed on 10/18/2007 has been considered.

Response to Arguments

4.   Finality is given with this office action because the change from "representative" to "indicative" adds to the claim interpretation of the event data being shown, whereas with representative, the event data only has to act for the cause of suspension, without being seen.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 5-9, 12, 13, 15, 16, 18-22, 25, 28, 29, 31-34 and 38-42 are rejected under

35 U.S.C. 102(e) as being anticipated by Moon et al. (US-6,385,662 hereinafter, Moon).

Regarding claim 5, Moon teaches a terminal device (Col. 1 lines 16-19 "PDA" &

"PCA"), comprising:

processing means for detecting one of a predetermined set of events (Fig. 2

[205]) that cause operation of an application program to suspend, the processing means

operable to generate event data indicative of a cause of the suspension of the

application program; (Fig. 3 [315])

the processing means further operable to suspend operation of an application

program when an event is detected; (Fig. 3 [320], Col. 3 lines 34-43, Col. 5 lines 14-36

and Col. 6 lines 3-15) and

storage means for storing the event data generated by the processing means;

wherein the processing means is further operable to resume operation of the application

program suspended by the processing means; (Fig. 2 [235] and Col. 5 lines 37-39) and

the processing means is further operable to deliver the stored event data to the

resumed application program to adjust further operation of the resumed application

program to be responsive to the cause of the suspension. (Col. 5 lines 29-32 and Fig. 3

[335 & 340])

Regarding claim 6, Moon teaches the storage means is operable to store sets of

event data each representing an event between the time period from the time of

suspension of operation of the application program by the processing means and the

time that operation of the application program is resumed by the processing means. (Col. 5 lines 39-43)

Regarding claim 7, Moon teaches the terminal device of claim 5, further comprising communication means for communicating via a communication network (Col. 1 lines 16-25), and wherein;

the processing means is operable to suspend operation of the application program when the communicating means receives a message designating a user of the terminal device. (Col. 4 lines 49-63)

Regarding claim 8, the limitations of claim 8 are rejected as being the same reason set forth above in claim 5.

Regarding claim 9, the limitations of claim 9 are rejected as being the same reason set forth above in claim 5.

Regarding claim 12, Moon teaches instructions stored in the memory to generate a message comprises instructions stored in memory to generate a query to a user that is related to the first predetermined event. (Col. 5 lines 19-20)

Regarding claim 13, Moon teaches the instruction stored in memory to generate a message comprises instructions stored in memory to generate a query to a user to launch another application to attend to the first predetermined event. (Col. 4 lines 52-55)

Regarding claim 15, Moon teaches the message comprises a text message. (Col. 1 lines 30-39 and Fig. 2 [215])

Regarding claim 16, Moon teaches the first predetermined event comprises receipt by the terminal device of an email or a call request. (Col. 2 lines 43-52 and Col. 4 line 56-58)

Regarding claim 18, Moon teaches the first predetermined event comprises execution of another application by the application. (Col. 1 lines 30-31 & 51-54)

Regarding claim 19, Moon teaches instructions stored in the memory to store event data for events that occur while the application is suspended (Col. 5 lines 39-43), and instructions stored in the memory to provide notification of the events that occur while the application is suspended, when execution of the application is resumed. (Col. 5 lines 14-53)

Regarding claim 20, Moon teaches the second predetermined event comprises a user command. (Fig. 3 [325, 330, 335 & 340] and Col. 5 lines 26-36)

Regarding claim 21, Moon teaches the second predetermined event comprises expiration of a predetermined time period. (Col. 4 line 65 through Col. 5 line 2 & Col. 5 lines 37-43)

Regarding claim 22, Moon teaches the second predetermined event comprises completion of the first predetermined event. (Fig. 2 [230 & 231])

Regarding claim 25, Moon teaches the instructions stored in memory to store event data comprises instructions stored in memory to set an event flag indicative of the first predetermined event. (Fig. 2 [205, 215 & 220])

Regarding claim 28, Moon teaches instructions stored in memory to delete the stored event data when execution of the application is resumed. (Fig. 2 [231])

Regarding claim 29, Moon teaches a display means for displaying information to a user, the display means operable to display a message related to the cause of the suspension, the resumed application program operable to generate the message in response to receipt of the delivered stored event data. (Fig. 4 [405] and Col. 2 lines 56-63)

Regarding claim 31, Moon teaches the resumed application program is configured to generate a message to notify a user of the cause of the suspension based on the stored event data. (Col. 2 lines 56-63)

Regarding claim 32, Moon teaches the predetermined set of events comprising receipt of an email or a voice call request. (Col. 4 line 49 through Col. 5 line 13)

Regarding claim 33, Moon teaches in response to the event being receipt of an email message, the processing means is further configured to resume operation of the suspended application program after a specified time has elapsed following display of the message. (Col. 4 line 49 through Col. 5 line 53)

Regarding claim 34, Moon teaches the processing means is further configured to generate different messages dependent on the cause of the suspension. (Col. 4 lines 56-60)

Regarding claim 38, the limitations of claim 38 are rejected as being the same reason set forth above in claim 32.

Regarding claim 39, the limitations of claim 39 are rejected as being the same reason set forth above in claim 29.

Regarding claim 40, the limitations of claim 40 are rejected as being the same reason set forth above in claim 5.

Regarding claim 41, the limitations of claim 41 are rejected as being the same reason set forth above in claim 8.

Regarding claim 42, the limitations of claim 42 are rejected as being the same reason set forth above in claim 9.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moon.

Regarding claim 14, Moon teaches the limitations of claims 12 and 13 above, but differs from the claimed invention by not explicitly reciting the message comprises an audio message. However, one of ordinary skill in the art would recognize that the PCA described by Moon is capable of receiving telephone calls (Col. 2 lines 43-44) which typically when received at the device plays an audio sound to notify the user. (*i.e.* ringing)

9.   Claims 17, 23, 24, 26, 27, 30 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Kurokawa et al. (US-7,016,706 hereinafter, Kurokawa).

Regarding claim 17, Moon teaches the limitations of claim 9 above, but differs from the claimed invention by not explicitly reciting the first predetermined event comprises receipt or transmission by the terminal device of data via a short range transmission.

In an analogous art, Kurokawa teaches a PDA that can communicate with a mobile radio terminal or a communication card over varying frequencies. (Col. 3 lines 18-23 and Col. 15 lines 26-31) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the PCA of Moon after modifying it to incorporate the communicating over varying frequencies of Kurokawa. One of ordinary skill in the art would have been motivated to do this since it is common for PDAs to be able to communicate over multiple networks.

Regarding claim 23, Moon in view of Kurokawa teaches the instructions stored in memory to suspend the application (Moon Col. 6 lines 8-15 *i.e.* minimizing and maximizing any active application), but differs from the claimed invention by not explicitly reciting that during the suspension, to maintain application related data in volatile memory that was input by a user prior to the suspension. However, it is obvious to one of ordinary skill in the art that the ability to suspend and resume applications as taught by Moon (Col. 6 lines 8-15) as implemented in a PCA would include the ability to save any inputted user information in volatile memory as taught by Kurokawa. (Col. 4 lines 44-65)

Regarding claim 24, Moon in view of Kurokawa teaches the instructions stored in memory to suspend the application comprises instructions stored in memory to maintain

the suspended application in volatile memory during the suspension. (Moon Col. 6 lines 8-15 and Kurokawa Col. 4 lines 44-65)

Regarding claim 26, Moon in view of Kurokawa teaches instructions stored in memory to store an indicator of the first predetermined event and an identifier of the suspended application in a table. (Kurokawa Col. 13 lines 10-15)

Regarding claim 27, Moon in view of Kurokawa teaches instructions stored in memory to store the application in volatile memory when the application is launched, and instructions stored in memory to suspend the application comprises instructions stored in memory to maintain the application in the volatile memory until execution is resumed. (Moon Col. 6 lines 8-15 & Kurokawa Col. 4 lines 44-65)

Regarding claim 30, Moon in view of Kurokawa teaches the processing means is further operable to maintain as unchanged data input by a user and temporarily stored in the terminal device during operation of the application program. (Moon Col. 6 lines 8-15 & Kurokawa Col. 4 lines 44-65)

Regarding claim 35, the limitations of claim 35 are rejected as being the same reason set forth above in claims 27 and 30.

Regarding claim 36, the limitations of claim 36 are rejected as being the same reason set forth above in claim 26.

Regarding claim 37, the limitations of claim 37 are rejected as being the same reason set forth above in claim 30.

Conclusion

10.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.   Accordingly, **THIS ACTION IS MADE FINAL**.   See MPEP § 706.07(a).   Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action.   In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action.   In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922.   The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCS
11/26/2007

LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER